

TO 31 JAN 2005

## INTERNATIONAL SEARCH REPORT

International application No.

PCT/US03/24460

<b>A. CLASSIFICATION OF SUBJECT MATTER</b>												
IPC(7) : A01N 1/02; G01N 1/30, 33/48; C07K 1/00; A61B 17/43, A61D 7/00												
US CL : 435/2, 40.51; 530/827, 852; 600/33, 35												
According to International Patent Classification (IPC) or to both national classification and IPC												
<b>B. FIELDS SEARCHED</b>												
Minimum documentation searched (classification system followed by classification symbols)												
U.S. : ((												
Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched												
Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)												
CAPLUS, MEDLINE, EMBASE, BIOSIS, LIFESCI												
<b>C. DOCUMENTS CONSIDERED TO BE RELEVANT</b>												
Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.										
Y	PENFOLD, L.M. et al. Comparative Motility of X and Y Chromosome-Bearing Bovine Sperm Separated on the basis of DNA Content. Mol. Reprod. and Develop. 1998, Vol 50, pages 323-327, see entire document.	1-16, 24, 25, 27, 28, 30, 31, 39-54, 58-60										
Y	BEYHAN, Z. et al. Sexual Dimorphism in IVM-IVF Bovine Embryos Produced From X and Y Chromosome-Bearing Spermatozoa Sorted by High Speed Flow Cytometry. Theriogenology. 1999, Vol. 52, pages 35-48, see entire document.	1-16, 23-25, 27, 28, 30, 31, 33, 34, 36, 37, 39-61										
Y	RATHI, R. et al. Evaluation of In Vitro Capacitation of Stallion Spermatozoa. Biology of Reproduction. 2001, Vol. 65, pages 462-470, see entire document.	1-9, 17-24, 26, 27, 29, 30, 32, 33, 35, 36, 38, 41-61										
Y	BUCHANAN, B.R. et al. Insemination of Mares with Low Numbers of Either Unsexed or Sexed Spermatozoa. Theriogenology. 2000, Vol. 53, pages 1333-1344, see entire document.	1-9, 17-24, 26, 27, 29, 30, 32, 33, 35, 36, 38, 41-61										
<input type="checkbox"/> Further documents are listed in the continuation of Box C. <input type="checkbox"/> See patent family annex.												
* Special categories of cited documents: <table border="0"> <tr> <td>"A" document defining the general state of the art which is not considered to be of particular relevance</td> <td>"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention</td> </tr> <tr> <td>"B" earlier application or patent published on or after the international filing date</td> <td>"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone</td> </tr> <tr> <td>"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)</td> <td>"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art</td> </tr> <tr> <td>"O" document referring to an oral disclosure, use, exhibition or other means</td> <td>"E" document member of the same patent family</td> </tr> <tr> <td>"P" document published prior to the international filing date but later than the priority date claimed</td> <td></td> </tr> </table>			"A" document defining the general state of the art which is not considered to be of particular relevance	"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention	"B" earlier application or patent published on or after the international filing date	"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone	"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)	"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art	"O" document referring to an oral disclosure, use, exhibition or other means	"E" document member of the same patent family	"P" document published prior to the international filing date but later than the priority date claimed	
"A" document defining the general state of the art which is not considered to be of particular relevance	"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention											
"B" earlier application or patent published on or after the international filing date	"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone											
"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)	"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art											
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"P" document published prior to the international filing date but later than the priority date claimed												
Date of the actual completion of the international search		Date of mailing of the international search report										
19 March 2004 (19.03.2004)		22 JUN 2004										
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